

ABSTRACT OF THE DISCLOSURE

Apparatus and methods are disclosed for controlling flow of fluid inside a chamber. A device comprises a chamber comprising at least one wall, a first opening for introducing a fluid into the interior of the chamber, and a second opening opposite the first opening. The at least one wall of the chamber is designed to provide a contracting section, a section having substantially constant cross-sectional area and a diffusing section through the chamber from the first opening to the second opening. The device may be employed as a gas outlet in a reaction chamber for conducting reactions where it is desired to control the internal atmosphere of the reaction chamber. The apparatus may be employed in the manufacture of biopolymers on the surface of a support such as an array of biopolymer features on the support. Also disclosed is a holding element for a support wherein the holding element is a low drag body.